

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: December 29th, 2020

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels showed mixed trends throughout the District over the last week. The majority of the United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) within the District boundaries are at median levels and their upper percentile ranges for this time of year. The wells in the northern portion of the KB are completed in the Floridan aquifer and the wells in southern KB are completed in the surficial aquifer system. Most of the surface and groundwater stations throughout the KB recorded decreases in water levels over the last week.

Stages in the Upper East Coast (UEC) canals C-23, C-24, and C-25 are 21.87, 20.64, and 22.10 feet, all above the fourteen feet agricultural cut-off. About two thirds of the surficial aquifer stations are in their upper percentile ranges, with the remainder at median levels. Surface and groundwater levels decreased in most of the Lower East Coast (LEC) stations over the past week. Approximately two thirds of Biscayne aquifer wells are in their upper percentile ranges for this time of year, with the remainder at median levels.

Groundwater levels increased in about two thirds of the Lower West Coast (LWC) stations over the last seven days. About eighty percent of the Surficial aquifer wells are in their upper percentile ranges for this time of year, with the remainder at median levels. Over half of the Lower Tamiami aquifer wells are in the upper percentile ranges, with the remainder at median levels. About half of Sandstone aquifer monitor wells are at median levels for this time of year, with the remainder in the upper percentile ranges. Approximately fifty percent of the Mid-Hawthorn aquifer monitor wells are in the lower percentile ranges, with the remainder in the upper percentile ranges. **Figure 1** summarizes current conditions.

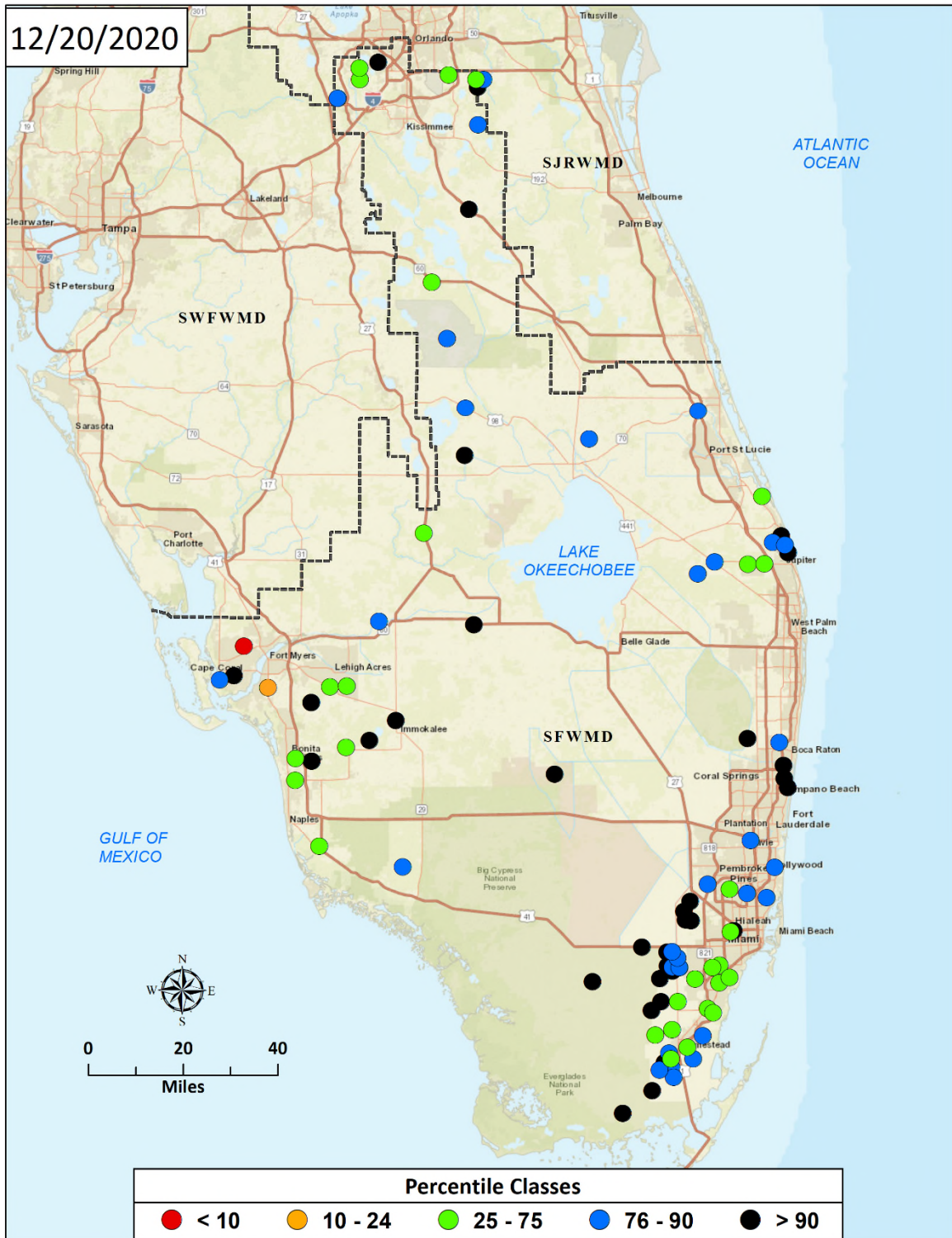


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is 1.48 classified as “normal to extremely wet,” and is in the “low” risk category for water supply. The LOK stage for the next two months is projected to be in the Low Sub Band, and the risk to water supply is categorized as “moderate.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “below normal” for one month and “below normal” for three months, leaving the one-month outlook in the “moderate” risk category and three-month outlook in the “high” risk category. The LOK Seasonal Net Inflow Forecast is in the “extremely dry” category and is in the “high” risk category. The Multi-Seasonal Net Inflow Forecast is in the “normal” range with “moderate” risk to water supply. The stages in WCA 1, WCA 2A and WCA 3A are all above line 1 and are in the “low” risk category. Year-Round Irrigation Rule is in effect for the LEC Service Areas. All Service Areas are in the “low” risk category for water supply. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 12/28/2020 (ENSO Condition- La Nina):

Status for week ending 12/28/2020:

Water Supply Risk Evaluation

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Low Sub-band	M
	Palmer Drought Index for LOK Tributary Conditions	1.58 (Normal to Extremely Wet)	L
	CPC Precipitation Outlook	1 month: Below Normal	M
		3 months: Below Normal	H
	LOK Seasonal Net Inflow Outlook	-0.33 ft	H
	ENSO Forecast	Extremely Dry	
	LOK Multi-Seasonal Net Inflow Outlook	2.38 ft	M
WCAs	WCA 1: 3 Station Average (Site 1-7, 1-8T and 1-9)	Above Line 1 (17.34 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (13.44 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (11.74 ft)	L
LEC	Service Area 1	Year-Round Irrigation Rule in effect	L
	Service Area 2	Year-Round Irrigation Rule in effect	L
	Service Area 3	Year-Round Irrigation Rule in effect	L

Note: The water supply risk classification based on the Palmer index, as well as the LOK seasonal and multi-seasonal net inflow outlooks use slightly different classification intervals than those used by the 2008-LORS.

Figure 2. Water Supply Risk Indicators